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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,141	01/22/2002	Ralph L. Brooker	47176-00621	1090
30223	7590	11/03/2004	EXAMINER	
JENKENS & GILCHRIST, P.C.			LE, HOANGANH T	
225 WEST WASHINGTON			ART UNIT	
SUITE 2600			PAPER NUMBER	
CHICAGO, IL 60606			2821	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/051,141

Applicant(s)

BROOKER ET AL.

Examiner

HoangAnh T Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-13, 24-32, 34-40, 42-44, 47, 49-52, 54, 55 and 57-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 10-13, 24-32, 34-40, 42, 43, 47, 49-52, 54, 55, 65 and 67 is/are allowed.
- 6) ☒ Claim(s) 44, 57-64, 66 and 68-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. The RCE filed on September 20, 2004 is acknowledged.

#### ***Claim Objections***

2. Claims 36,49,50 and 66-67 are objected to because of the following informalities:  
in claim 36, line 1, "one" should be deleted; in claims 49 and 50, line 1, "48" should be –  
47; in claim 66, lines 1 and 2, "said antenna structure comprises both said feed and said  
sub-reflector and" should be –the method--; in claim 67, line 1, "The method" should be  
–The antenna--. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly  
claiming the subject matter which the applicant regards as his invention.

4. Claims 44, 57-64,66 and 68-72 are rejected under 35 U.S.C. 112, second  
paragraph, as being indefinite for failing to particularly point out and distinctly claim the  
subject matter which applicant regards as the invention.

In claim 44, are "a sub-reflector" in lines 1-2 and "a sub-reflector" in line 4 the  
same?

In claim 57, are "a sub-reflector" in line 1 and "a sub-reflector" in line 3 the same?

Claims 58 and 62 recites "mounting an actuator to said one of a feed and a sub-  
reflector and said support struts". From the claim, it is not clear how an actuator can be  
mounted to one of the feed and sub-reflector and said support struts?

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In claim 61, are "a sub-reflector" in line 1 and "a sub-reflector" in line 3 the same?

Claim 62 recites the limitation "said one of a feed and a sub-reflector" in line 3.

There is insufficient antecedent basis for this limitation in the claim.

Claim 68 recites the limitation "said reflectors" in line 8. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 57-59 and 61-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Szirtes (the US patent No. 3,553,731, of record).

The Szirtes reference teaches an antenna comprising: a reflector 10, one of a feed and a sub-reflector 13, and a plurality of support struts 21-26 coupled between the reflector 10 and the one of a feed and a sub-reflector 13 and supporting the one of the feed and the sub-reflector 13; and at least one actuator 31 for adjusting the position of the one of the feed and the subreflector 13 relative to the reflector 10. Since the position of the sub-reflector 13 is adjusted relative to the reflector 10, the beam elevation and azimuth of the main beam axis of the antenna would inherently be adjusted. At least two actuators 31-36 are mounted to the reflector and the support struts.

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7. Claims 68 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Bruns et al (the US Patent No. 4,804,971, of record).

The Bruns et al reference teaches in figure 1 a self-pointing antenna comprising: an antenna comprising a reflector 10, a feed 27, an elongated boom arm 24 coupled to the reflector 10 and supporting the feed 27, and a pair of support struts 28a,28b coupled between the reflector and the boom arm; and an actuator 32 for adjusting a effective length of the support struts to thereby adjust the position of the feed relative to the reflector. The actuator comprises a pair of actuators 32 mounted to the reflector and each operatively coupled to the one of the support struts.

***Allowable Subject Matter***

8. Claims 1-8, 10-13, 24-32, 34-40, 42-43, 47, 49-52, 54-55, 65, and 67 are allowed.

9. Claims 60, 64, and 69-71 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

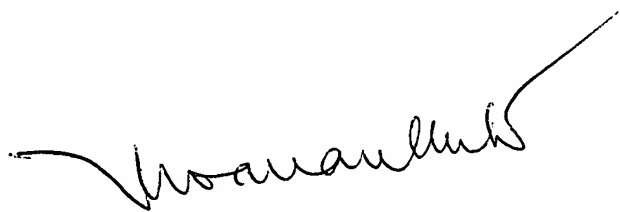
10. Claims 44 and 66 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hoanganh Le', with a long, sweeping horizontal line extending to the right.

Hoanganh Le  
Primary Examiner